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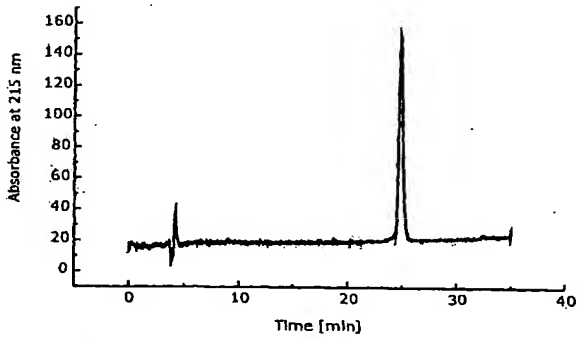
(54) Title: PEPTIDES AND THEIR USE FOR THE TREATMENT OF HIV INFECTIONS



(57) Abstract: The invention relates to peptides with biological activity against infection having the amino acid sequence Z_1-LE-X_1-IP-X_2-X_3-X_4-P-X_5-X_6-X_7-X_8-X_9-X_{10}-K-X_{11}-X_{12}-X_{13}-X_{14}-X_{15}-Z_2, wherein X_1 is a lysine, alanine, or aspartic acid; X_2 is a cysteine, methionine or isoleucine; X_3 is a serine, cysteine, lysine or glycine; X_4 is an isoleucine, alanine, phenylalanine or cysteine; X_5 is a proline, D-proline or a substituted L-or D-proline; X_6 is a cysteine or glutamic acid; X_7 is an amino acid with a hydrophobic or an aromatic side chain or cysteine; X_8 is an amino acid with a hydrophobic or an aromatic side chain or cysteine; X_9 is an amino acid with an aromatic side chain; X_{10} is a glycine, alanine or asparagine; X_{11} is a proline, aspartic acid, octahydroindolyl-2-carboxylic acid or D-1,2, 3,4-tetrahydroisoquinoline-3-carboxylic acid; X_{12} is a phenylalanine, alanine, glycine, glutamic acid or D-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid; X_{13} is an amino acid with a hydrophobic or an aromatic side chain; X_{14} is an amino acid with a hydrophobic or an aromatic side chain; X_{15} is a phenylalanine or deletion; Z_1 is NH_2 or a sequence of 1 to 10 amino acid residues; Z_2 is COOH or a sequence of 1 to 10 amino acid residues; and peptides which are fragments and/or covalently linked oligomers and/or derivatives, especially amidated, alkylated, acylated, sulfated, pegylated, phosphorylated and/or glycosylated derivatives, and mutants thereof, and with the provisio that (a) if X_{12} is alanine, glycine, glutamic acid, or D-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid than X_{13}, X_{14} and X_{15} are phenylalanine, valine and phenylalanine respectively; and/or (b) if X_{12} is phenylalanine, than X_{13}, X_{14} and X_{15} are valine, phenylalanine and a deletion, respectively; and (c) that there are at maximum two cysteine residues in a peptide.

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